



# Modeling & Simulation Resource Repository Board of Directors Briefing

*Deborah Kelly  
DSC Analytic Services*



# Our Mission: Support Improved C4ISR Analysis

*Develop and maintain databases of C4ISR-related studies, M&S tools, and points of contact to:*

- Facilitate opportunities for consolidating C4ISR study efforts and leveraging past work effectively
- Promote reutilization of C4ISR modeling and simulation tools
- Help reduce C4ISR analytic costs



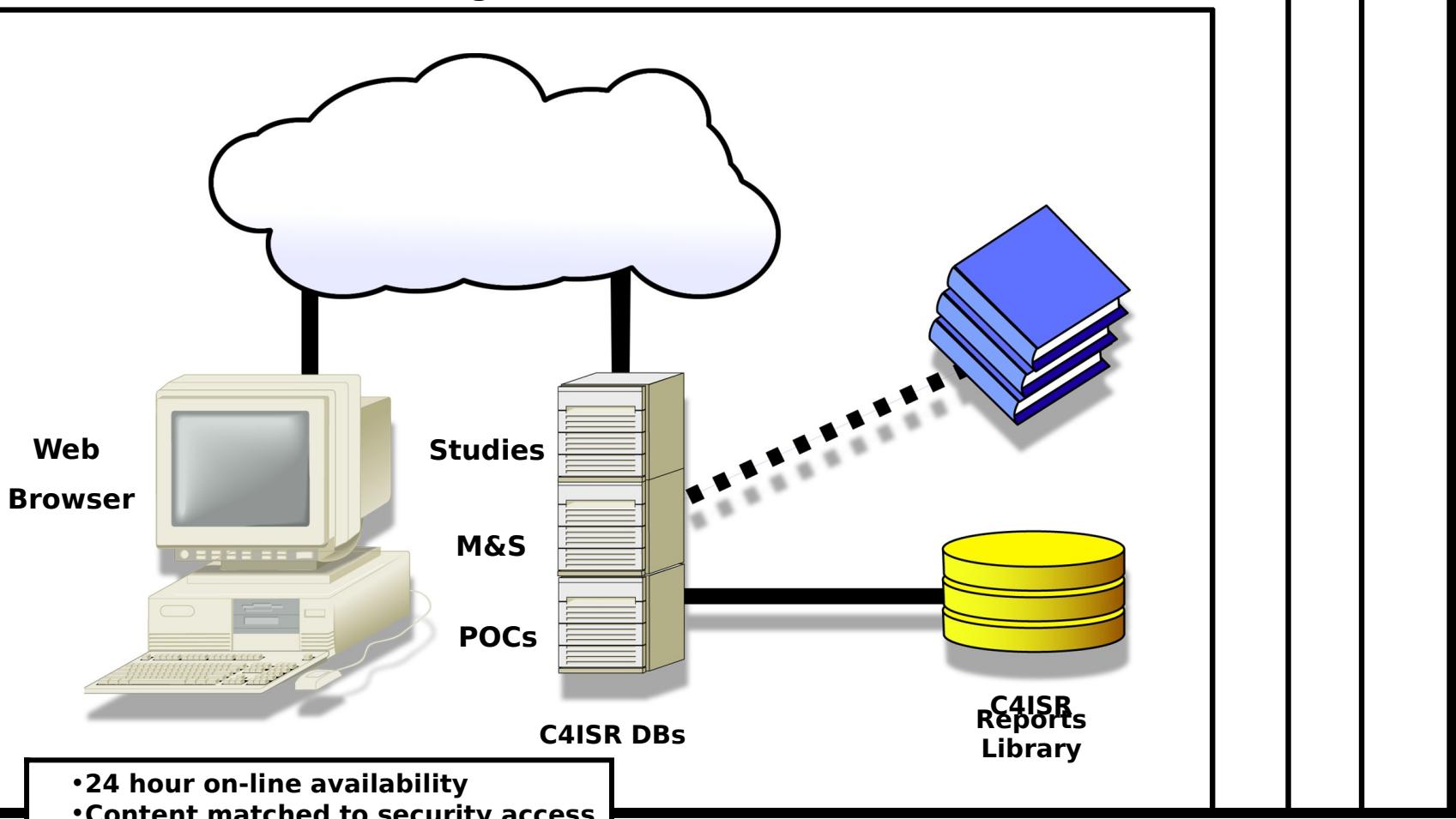
# DSC Analytic Databases: The Concept

**UNCLASS** at [www.dsc.osd.mil/](http://www.dsc.osd.mil/) (**Registration/Password Required**)

**SECRET** via **SIPRNET** at

~~206.36.143.34/DSC/index.html~~

**SCI** via **Intelink** at [www.c3i.ic.gov](http://www.c3i.ic.gov)





# Features of the DSC M&S Database

- Currently on-line on the WWW , SIPRNET; and Intelink
  - follow procedures on DSC homepage to obtain user ID and password (for WWW)
- M&S DB contains complete and detailed records on over 120 M&S tools -- object-oriented approach
- Linked at the record-to-record level with a DB of C4ISR-related studies -- provides insight on how tools are used
- Taxonomy contains general model information and C4ISR-specific assessment
- Includes several different search modalities and a “Consumer Reports” ranking of C4ISR functionality



# DSC MSRR Concerns

- Maintain security of the information in studies database, while maintaining ability to link between studies and M&S databases
- Tracking usage of DSC Databases
- Maintaining unique C4ISR focus in record taxonomy and search capability in accordance with DSC mission
- Cost Impacts



# DSC MSRR Concerns

- What is the minimum from user perspective?
  - Understand what sources of information are available and what each provides
  - Know what models are characterized in what databases
  - Ready ability to access model records



# MSRR Options

## OPTION 1

- **Maintain the Status Quo**

- Continue to provide direct access service to nodes/sites only

- **PROS:**

- Each site maintains control of its own database
    - No additional cost to nodes/sites
    - Users currently familiar with structure

- **CONS:**

- Separate efforts limits visibility and customer usage.
    - Viewed by user as disjointed activity
    - Too many username/passwords for users to remember
    - Each site operates differently



# MSRR Options (Cont.)

## OPTION 2

- **Create Simple Linkage Between Node Sites**
  - All sites have links to each other showing what additional data may be available at different sites
- **PROS:**
  - Each site maintains control of their database
  - Allows customers to window shop for related web sites
  - Gets node visibility to a larger user community
  - Minimal cost to nodes/sites
- **CONS:**
  - Requires maintaining updated links
  - Multiple usernames/passwords for users to remember
  - Each site operates differently



# MSRR Options (Cont.)

## OPTION 3

- **Federate All Nodes/Sites**

### A: Loose Federation: Sharing of username/passwords

- **PROS:**

- Increases potential customer base through shared capabilities
- Allows users to logon to multiple sites via single username/password

- **CONS:**

- Username/Passwords must be shared between nodes/sites
- Username/Password scheme must all be compatible
- Cost of implementation and operations to each node/site



# MSRR Options (Cont.)

## **B: *Tight Federation*: Centralized management of user access**

- **PROS:**

- Increases potential customer base through shared capabilities
- Simplifies efforts for users
- Allows users to logon to multiple sites via single username/passwords

- **CONS:**

- Requires central administration of username/passwords
  - » or standard username/password scheme
- Moderate cost to DSC
- Cost of implementation and operations to each node/site



# Summary

- DSC Supports specific C4ISR analytical user requirements
  - Both M&S and Studies
  - C4ISR functional Model characterizations
- More than Repository of general Model information
  - Advanced search functions
  - C4ISR functional area Model with "Consumer Reports" ranking's
- Willing to participate, but need to maintain characterized C4ISR focus



# Back-up Slides



# Features Of The DSC C4ISR Database

## 1 C4ISR Modeling & Simulation

- What We Are Doing
  - Characterize M&S Based on Standard C4ISR Schema
    - Electronic Characterization Tool
  - Currently Exceed 124 **VERIFIED** M&S Records
    - Four New Models Added per Month on Average
    - Not a Static Database, Records are Re-Verified
      - » High Value Models: Semi-Annually
      - » All Others: Annually
    - Characterizations **APPROVED** by Sponsoring Agency
    - 342 Models Identified with Relevant C4ISR Information
    - 114 Models Currently In Characterization Process
- How Is The Database Used?
  - “Consumer Reports”
    - View/Ranking
  - Object Oriented
    - User Friendly, Easily Searched



# Features Of The DSC C4ISR Database (Cont.)

## 2 C4ISR Studies

- Provide Additional Insight on How Tools are Used
- Link Between M&S and Studies Databases
  - Allows User to Perform Research Between Databases
    - Links M&S With Studies That Used Them
  - Provides User with Insight Into Tool Suitability Across Applications
- Provides Point of Contact Lists for Each Tool